

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An imaging system, comprising:
an output device including a two-dimensional array of pixels; and
an input device that includes ~~a pixel device~~ a plurality of pixel devices which
~~further includes, each pixel device including:~~
_____ a multi-color sensor or an x-ray sensor that provides an electronic
signal ~~that represents a multi-color image or an x-ray image to the two-dimensional array of~~
~~pixels, the sensor being a multi-color sensor or an x-ray sensor;~~
_____ at least one transistor connected to the sensor;
_____ a first capacitor that is selectively connected to the sensor;
_____ a second capacitor that is selectively connected to the sensor; and
_____ a controller that selectively stores the entirety of the electronic signal
provided by the sensor and that represents a multi-color image or an x-ray image in either the
first capacitor or the second capacitor;
_____ wherein each pixel device corresponds to a respective pixel in the two
dimensional array of pixels.

2. (Previously Presented) The imaging system according to claim 1, the pixel
device further comprising:
a plurality of transistors and at least two control signals, one of the at least two
control signals controlling one of the plurality of transistors so that the electronic signal is
stored in the first capacitor, and the other one of the at least two control signals controlling

another one of the plurality of transistors so that the electronic signal is stored in the second capacitor.

3. (Original) The imaging system according to claim 2, wherein the first capacitor is independently active for greater than 10 microseconds.

4. (Withdrawn) The imaging system according to claim 2, the pixel device further comprising a third and fourth capacitor connected to the sensor.

5. (Withdrawn) The imaging system according to claim 4, the pixel device further comprising:

a plurality of control signals, at least one of the plurality of control signals controlling a third one of the plurality of transistors so that the electronic signal is stored in the third capacitor, and at least another one of the plurality of control signals controlling a fourth one of the plurality of transistors so that the electronic signal is stored in the fourth capacitor.

6. (Withdrawn) The imaging system according to claim 3, the imaging system further comprising a transmitter that transmits an x-ray beam that is received by the input device so that the electronic signal represents an x-ray image taken of a human body.

7. (Withdrawn) The imaging system according to claim 6, further comprising the transmitter being synchronized to a switching of the control signals to the two-dimensional array of pixels.

8. (Withdrawn) An imaging system, comprising:

~~a two-dimensional array of pixels;~~

an input device that includes a ~~pixel device which further includes~~ plurality of pixel devices, each pixel device including:

_____ a multi-color sensor or an x-ray sensor that provides an electronic ~~signal~~signal; ~~that represents a multi-color image or an x-ray image to the two-dimensional array of pixels, the sensor being a multi-color sensor or an x-ray sensor;~~

_____ a first capacitor that is selectively connected to the sensor;

_____ a second capacitor that is selectively connected to the sensor; and

_____ a controller that selectively stores the entirety of the electronic signal provided by the sensor and that represents a multi-color image or an x-ray image in either the first capacitor or the second capacitor; and

_____ ~~the pixel device further comprising~~ a third and fourth capacitor connected to the sensor; and

an output device including:

_____ a two-dimensional array of pixels; and

_____ a plurality of transmitters that transmit different optical images onto the two-dimensional array of pixels, or which illuminate different attributes of an object whose image lands on the two-dimensional array of pixels;

_____ wherein each pixel device corresponds to a respective pixel in the two dimensional array of pixels.

9. (Withdrawn) The imaging system according to claim 8, wherein the plurality of transmitters are synchronized to a switching of the control signals to the two-dimensional array of pixels, such that one attribute is stored in the first capacitor, and another attribute is stored in the second capacitor.

10. (Withdrawn) The imaging system according to claim 9, wherein the different attributes of the object are different colors.

11. (Withdrawn) An imaging system, comprising:

an output device including a two-dimensional array of pixels;

an input device that includes a plurality of pixel devices, each pixel device including:

_____ a multi-color sensor or an x-ray sensor that provides an electronic signal that represents a multi-color image or an x-ray to the two-dimensional array of pixels, the sensor being a multi-color sensor or an x-ray sensor;

_____ a first capacitor that is selectively connected to the sensor;

_____ a second capacitor that is selectively connected to the sensor;

_____ a controller that selectively stores the entirety of the electronic signal provided by the sensor and that represents a multi-color image or an x-ray image in either the first capacitor or the second capacitor; and

_____ ~~the pixel device further comprising a third and fourth capacitor~~ connected to the sensor; and

~~a readout scheme which~~ wherein the controller resets a voltage across the first and second capacitors to different values, such that the sensor is sensitive to different attributes of the image due to a changed voltage across the sensor.

12. (Withdrawn) An imaging system, comprising:

an output device including a two-dimensional array of pixels; and

an input device that includes a plurality of pixel devices, each pixel device including:

_____ a multi-color sensor or an x-ray sensor that provides an electronic signal that represents a multi-color image or an x-ray image to the two-dimensional array of pixels, the sensor being a multi-color sensor or an x-ray sensor;

_____ at least one transistor connected to the sensor;

_____ a controller that provides control signals and that selectively stores the entirety of the electronic signal provided by the sensor and that represents a multi-color image or an x-ray image in either a first capacitor or a second ~~capacitor~~, capacitor;

wherein the controller stores the electronic signal ~~is stored~~ in the first capacitor during a phase of one control signal, or ~~is not stored~~ does not store the electronic signal in the first capacitor during a phase of another control signals.

13. (Withdrawn) The imaging system according to claim 12, the two-dimensional array of pixels further comprising:

a plurality of transistors, one of the control signals controlling one of the plurality of transistors so that the electronic signal is stored in the first capacitor during the phase of the one of the control signals, and another one of the control signals controlling another one of the plurality of transistors so that the electronic signal is not stored in the first capacitor during the second phase of the another one of the control signals.

14. (Withdrawn) The imaging system according to claim 12, the imaging system further comprising a transmitter that transmits an x-ray beam that is received by the input device so that the electronic signal represents an x-ray image taken of a human body, where the transmission of the x-rays are synchronized to the control of the two-dimensional array of pixels.

15. (Withdrawn) The imaging system according to claim 13, further comprising the controller controlling the electronic signal based on color features within the electronic signal so that one color of the electronic signal is stored in the first capacitor, and another color of the electronic image is not stored in the first capacitor.

16. (Withdrawn) The imaging system according to claim 13, wherein by not storing the electronic signal in the first capacitor, storage of sensor leakage current in the first capacitor is prevented.

17. (Withdrawn) An imaging system, comprising:

an output device including a two-dimensional array of pixels; and

an input device that includes a plurality of pixel devices, each pixel device including:

_____ a multi-color sensor or an x-ray sensor that provides an electronic signal that represents a multi-color image or an x-ray image to the two-dimensional array of pixels, the sensor being a multi-color sensor or an x-ray sensor;

_____ at least one capacitor; and

_____ a controller that provides a first and second control signal,

wherein the controller controls the electronic signal that represents a multi-color image or an x-ray image controlled by the controller so that the electronic signal is either added to the at least one capacitor when a phase of the first control signal is high and a phase of the second control signal is low, or the electronic signal is subtracted from the at least one capacitor when a phase of the first control signal is low and a phase of the second control signal is high.

18. (Currently Amended) An imaging system, comprising:

an output device including a two-dimensional array of pixels; and

an input device that includes a pixel device which further includes plurality of pixel devices, each pixel device including:

_____ a multi-color sensor or an x-ray sensor that provides an electronic signal that ~~represents a multi-color image or an x-ray image to the two-dimensional array of pixels, the sensor being a multi-color sensor or an x-ray sensor;~~

_____ at least one transistor connected to the sensor;

_____ a first capacitor that is selectively connected to the sensor;

_____ a second capacitor that is selectively connected to the sensor; and

_____ a controller that:

_____ controls the electronic signal that represents a multi-color image or an x-ray image ~~the image~~ provided by the sensor; and

_____ selectively stores the entirety of the electronic signal that represents the multi-color image or an x-ray image in either the first capacitor or stores the entirety of the electronic signal that represents the multi-color image or an x-ray image in the second capacitor.